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To:	Examiner Eric Kao		rom:	Alan Stern
 Fax:	571-270-4128		Pages:	7 (Including Cover)
Phone:	571-270-3128		Date:	June 4, 2009
Re:	S.N. 10/722,964 Atty. Docket 871,0117			
☐ Urgent ☑ For Review ☐ Please Comment ☐ Please Reply ☐ Please Recycle				
Examiner Kao:				
Further to our phone call last week, attached please find claim amendments to be effected by an Examiner's Amendment.				
Should you have any further questions or issues, please do not hesitate to call me at (203) 925-9400 ext. 18.				
Sincerely,				

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IN THE U.S. PATENT AND TRADEMARK OFFICE

In re U.S. Patent Application of:

APPLICANTS: Sarvesh Asthana

SERIAL NO.: 10/722,964

FILING DATE:

November 26, 2003

EXAMINER:

Kao, Wei Po Eric

ART UNIT:

2416

ATTORNEY'S DOCKET NO.: 871.0117.U1(US)

TITLE:

METHOD AND APPARATUS TO PROVIDE EFFICIENT PAGING FOR A

NETWORK INITIATED DATA SESSION

CLAIMS FOR EXAMINER'S AMENDMENT

This document is provided pursuant to a telephone conversation with the Examiner conducted on May 28, 2009. At that time, various amendments to the claims were discussed. In response thereto, this document proposes claim amendments for claims 2 and 28 and the cancellation of claim 7. These claim amendments further clarify the claimed subject matter. No new matter is added.

I hereby give permission for the Examiner to effect the attached claim amendments via an Examiner's Amendment for the above-referenced patent application.

June 4, Zerog

Respectfully submitted:

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S.N.: 10/722,964 Art Unit: 2416 Claim Amendments For Examiner's Amendment

AMENDMENTS TO THE CLAIMS:

This listing of the claims will replace all prior versions, and listings, of the claims in this application.

Claim 7 is canceled herein without prejudice or disclaimer.

Claims 1, 23-27, 31 and 33-39 were previously canceled without prejudice or disclaimer.

Listing of Claims:

- 1. (Canceled)
- 2. (Currently Amended) A method comprising:

receiving, by a base station BS, a message from a mobile station MS within a wireless network, the message indicating a current location of the MS and that the MS is in an Idle state; and

triggering the sending of further messages in the wireless network from the BS to a Packet Control Function PCF, and from the PCF to a Packet Data Serving Node PDSN, and from the PDSN to an Authentication, Authorization and Accounting AAA server, such that information that is indicative of a current BS/PCF/PDSN affiliation of the MS at the current location of the MS is recorded by the AAA server: and

in response to an occurrence of a network initiated data session (NIDS) for the MS, querying the AAA server to obtain at least the information for the MS.

- 3. (Original) A method as in claim 2, where the MS is identified by its International Mobile Subscriber Identity IMSI, and where the PDSN is identified by its Internet Protocol IP address.
- 4. (Original) A method as in claim 2, further comprising, in response to a presence of packet data to be sent to the MS, querying the AAA server to obtain the current BS/PCF/PDSN affiliation of

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the MS.

5. (Previously Presented) A method as in claim 2, where the message comprises a sub-paging

zone identifier of the MS, the method further comprising: comparing the received sub-paging

zone identifier with a previously received sub-paging zone identifier, and detecting that the MS

has changed its location in the wireless network when the received sub-paging zone identifier

does not match with the previously received sub-paging zone identifier.

6. (Original) A method as in claim 2, where the information comprises a sub-paging zone

identifier SPZ_ID, a paging zone identifier PZID, and an Internet Protocol IP address of the

PDSN.

7. (Canceled)

8. (Previously Presented) A method comprising:

in response to receiving a Registration message from a mobile station MS at a base station BS

within a wireless network, the Registration message containing a sub-paging zone identifier

SPZ_ID, sending further messages in the wireless network from the BS to a Packet Control

Function PCF, from the PCF to a Packet Data Serving Node PDSN, and from the PDSN to an

Authentication, Authorization and Accounting AAA server, such that information that is

indicative of a current location of the MS is recorded by the AAA server; and

in response to an occurrence of a network initiated data session (NIDS) for the MS, querying the

AAA server to obtain at least the current location of the MS.

9. (Original) A method as in claim 8, where the MS is identified by its International Mobile

Subscriber Identity IMSI, and where the PDSN is identified by its Internet Protocol IP address.

10. (Original) A method as in claim 8, where the information comprises the sub-paging zone

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identifier SPZ_ID, a paging zone identifier PZID, and an Internet Protocol IP address of the PDSN.

- 11. (Original) A method as in claim 10, where querying comprises querying the AAA server to obtain at least the SPZ_ID, PZID and PDSN IP Address that are recorded for the MS.
- 12. (Original) A method as in claim 8, where the message sent from the PDSN to the AAA server is sent via a Lightweight Directory Access Protocol LDAP interface.
- 13. (Original) A method as in claim 8, where the message sent from the PDSN to the AAA server is sent via a JAVA/SQL interface.
- 14. (Original) A method as in claim 8, where the message sent from the PDSN to the AAA server is sent via a visited AAA server.
- 15. (Original) A method as in claim 8, where the message sent from the PDSN to the AAA server is sent via at least one broker AAA server.
- 16. (Original) A method as in claim 8, where the message sent from the PCF to the PDSN is sent via an A10/A11 interface.
- 17. (Original) A wireless network operable with a mobile station MS, comprising a base station BS, responsive to receiving a Registration message from a MS that contains a sub-paging zone identifier SPZ_ID, for sending a message from the BS to a Packet Control Function PCF via an A8/A9 interface, said PCF, in response to receiving the message from the BS, for sending a message to a Packet Data Serving Node PDSN via an A10/A11 interface, said PDSN, responsive to receiving the message from the PCF, for sending a message to a home Authentication, Authorization and Accounting AAA server via one of a Lightweight Directory Access Protocol LDAP interface or a JAVA/SQL interface, said home AAA server recording information that is indicative of a current location of the MS, and further being responsive to a query received in

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response to an occurrence of a network initiated data session (NIDS) for the MS, for returning at least the current location of the MS.

- 18. (Original) A wireless network as in claim 17, where the MS is identified by its International Mobile Subscriber Identity IMSI, and where the PDSN is identified by its Internet Protocol IP address.
- 19. (Original) A wireless network as in claim 17, where the information comprises the subpaging zone identifier SPZ_ID, a paging zone identifier PZID, and an Internet Protocol IP address of the PDSN.
- 20. (Original) A wireless network as in claim 19, where querying comprises querying the home AAA server to obtain at least the SPZ_ID, PZID and PDSN IP Address that are recorded for the MS.
- 21. (Original) A wireless network as in claim 17, where the message sent from the PDSN to the home AAA server is sent via a visited AAA server.
- 22. (Original) A wireless network as in claim 17, where the message sent from the PDSN to the home AAA server is sent via at least one broker AAA server.
- 23-27. (Canceled)
- 28. (Currently Amended) A base station BS operable in a wireless network for receiving a Registration message from a mobile station MS, the Registration message containing a subpaging zone identifier SPZ_ID, said BS, in response to receiving the Registration message, triggering the sending of further messages in the wireless network from the BS to a Packet Control Function PCF, and from the PCF to a Packet Data Serving Node PDSN, and from the PDSN to a home Authentication, Authorization and Accounting AAA server, such that information that is indicative of a current location of the MS is sent to the home AAA server, and

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further being responsive to a query received in response to an occurrence of a network initiated data session (NIDS) for the MS, for returning at least the current location of the MS for enabling data to be received by the MS at its current location via the BS.

- 29. (Original) A BS as in claim 28, where the MS is identified by its International Mobile Subscriber Identity IMSI, and where the PDSN is identified by its Internet Protocol IP address.
- 30. (Original) A BS as in claim 28, where the information comprises the sub-paging zone identifier SPZ_ID, a paging zone identifier PZID, and an Internet Protocol IP address of the PDSN.
- 31. (Canceled)
- 32. (Original) A BS as in claim 28, where the message sent from the PDSN to the home AAA server is sent via at least one of a visited AAA server and a broker AAA server.
- 33-39. (Canceled)